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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/087,044	02/28/2002	Bob Janssen DVME-1020US		6490	
21302 75	90 04/07/2005	5 EXAMINER			
KNOBLE, YC	SHIDA & DUNLE. CENTER	LIM, K	LIM, KRISNA		
SUITE 1350, 1628 JOHN F KENNEDY BLVD			ART UNIT	PAPER NUMBER	
PHILADELPHIA, PA 19103			2153		

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/087,044	JANSSEN ET AL.			
		Examiner	Art Unit			
		Krisna Lim	2153			
The MAILING DATE of Period for Reply	this communication app	ears on the cover sheet with the c	orrespondence address			
THE MAILING DATE OF THIS - Extensions of time may be available un after SIX (6) MONTHS from the mailing - If the period for reply specified above is - If NO period for reply is specified above - Failure to reply within the set or extended	S COMMUNICATION. der the provisions of 37 CFR 1.13 date of this communication. less than thirty (30) days, a reply, the maximum statutory period w d period for reply will, by statute, an three months after the mailing	'IS SET TO EXPIRE 3 MONTH(16(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE date of this communication, even if timely filed	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1) Responsive to commun	1) Responsive to communication(s) filed on					
2a) This action is FINAL.	2b)⊠ This	action is non-final.				
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ⊠ Claim(s) <u>1-18</u> is/are per 4a) Of the above claim(s 5) □ Claim(s) is/are al 6) ⊠ Claim(s) <u>1-18</u> is/are rejection is/are of 7) □ Claim(s) is/are of 8) □ Claim(s) are subjections	e) is/are withdraw lowed. octed. ojected to.					
Application Papers						
9) The specification is object	cted to by the Examiner	•				
10) The drawing(s) filed on _	0) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
		on is required if the drawing(s) is obj aminer. Note the attached Office	• •			
Priority under 35 U.S.C. § 119						
a) All b) Some * c) 1. Certified copies o 2. Certified copies o 3. Copies of the cert application from the	None of: f the priority documents f the priority documents ified copies of the priori ne International Bureau	have been received in Application ty documents have been received	on No ed in this National Stage			
Attachment(s)						
1) Notice of References Cited (PTO-89		4) Interview Summary				
Notice of Draftsperson's Patent Dra Information Disclosure Statement(s) Paper No(s)/Mail Date		Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te atent Application (PTO-152)			

Office Action Summary

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1. Claims 1-18 are presented for examination.

2. The title of the invention is neither descriptive nor precise. A new title is required which should include, using twenty words or fewer, claimed features that differentiate the invention from the Prior Art. The title should reflect the gist of or the improvement of the present invention.

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- 3. The Abstract of the Disclosure is objected to because (a) Abstract should not contain more than one paragraph; and (b) Abstract should not use the means language. See M.P.E.P. § 608.01(b).
- 4. The drawings are objected to under 37 CFR 1.83(a) because they fail to show a computer program comprising one or more routine as described in claims 14, 16 and 17 Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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5. Applicants are required to submit a proposed drawing correction in response to this Office Action. However, the formal drawings of the correction of the noted defect can be deferred until the examiner allows the application. Moreover, the applicant is reminded of the provisions of M.P.E.P 608.02(r) regarding separate letter of the draftsman.

6. Claims 1-18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear how many is a maximum number because this maximum number can be any number. For example, it can be zero or nil or whatever the number is. It is unclear what kind of log-on request? It is unclear where or what the log-on request.

- 7. Claims 14, 16 and 17 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject mater.
- 8. An invention may be patented only if it falls within one of the four statutory classes of subject matter of 35 U.S.C. §§ 101. Kewanee Oil Co. V. Bicron Corp., 416 U.S. 470, 483, 181 USPQ 673, 679 (1974). The CCPA stated that "any process, machine, manufacture, or composition of matter constitutes statutory subject matter unless it falls within a judicially determined exception of section 101. " In re Pardo, 684 F.2d 912, 916, 214 USPQ 673, 677 (CCPA 1982). The claims are directed to non-statutory subject matter because the claimed subject matter:
- (A) does not fall within any of the four statutory classes of 25 U.S.C §§ 101; and/or
- (B) falls, by analogy, within the printed matter exception to 101 or within a new exception to computer programs <u>per se</u>.

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- 9. (A) In order to determine if the claimed invention falls within any of the four statutory classes, one must determine if the mere labeling by the preamble is sufficient to allow the claim to pass muster. The applicant has attempted to categorize his invention into one of the statutory classed by merely labeling the invention in the preamble as an article of manufacture (a program product) or as a storage device (memory). However, it is clear that the body of the claim is directed to computer program (means in memory) and not directed to a computer implemented process or apparatus since no computer is claimed. The claims are not directed to a computer implemented process, i.e., to a series of steps performed by a computer, which processes were held by the CCPA to constitute statutory subject matter unless within a judicially determined exception to 101. See "Patentable Subject matter -- Mathematical Algorithms and Computer Programs," 1106 off. Gaz. Pat. Office 5, 10-11, (Sept 5, 1989); In re Gelnovatch, 595 F.2d 32, 44, 201 USPQ 136, 147 (CCPA 1979) (What is usually at issue "is not the 'program' i.e., the software, but the process steps that the software directs the computer to perform"); In re Johnson, 589 F.2d 1070, 10891, n.12, 200 USPQ 199, 210 n.12 (CCPA 1978). Instead, the claims are expressly directed to a computer program or "software" intended to run on a computer, albeit claimed in functional terms as "means in memory for " rather than as lines of code, which may or may not be associated with structure.
- 10. Non-statutory subject matter cannot be automatically converted into statutory subject matter merely by broadly labeling the claim as an "article of manufacture" or by drafting the claims with token references to something that is statutory subject matter,

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such as "A program product, in computer readable form, for use in a data processing system"; this form of draftsmanship would amount to elevating over substance.

11. The limitation in the preamble generally are not entitled to patentable weight.

DeCeorge v. Bernier, 768 F.2d 1318, 1322 n.3, 226 USPQ 758, 761 n.3 ("Generally ...

the preamble does not limit the claims."; In re de Castelet, 562 F.2d 1236, 1244 n.6, 195

USPQ 439, 446 n.6 (CCPA 1977) ("The potential for misconstruction of preamble language requires that compelling reason exist before that language may be given weight.").

Here, the bodies of all claims recite only <u>"means in memory"</u> which is so broad that it is manifest that the invention sought to be patented is the "means in memory" (really, the computer program itself).

- 12. (B) This leads to the second determination which is whether the <u>"means in</u> memory" is considered to be statutory subject matter.
- 13. The claimed invention is directed toward non-statutory subject matter under the printed matter exception to 35. U.S.C. § 101.
- 14. The limitation in the preamble generally are not entitled to patentable weight.

 DeCeorge v. Bernier, 768 F.2d 1318, 1322 n.3, 226 USPQ 758, 761 n.3 ("Generally ...

 the preamble does not limit the claims."; In re de Castelet, 562 F.2d 1236, 1244 n.6, 195

 USPQ 439, 446 n.6 (CCPA 1977) ("The potential for misconstruction of preamble language requires that compelling reason exist before that language may be given weight.").

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Here, the bodies of all claims recite only <u>"means in memory"</u> which is so broad that it is manifest that the invention sought to be patented is the "means in memory" (really, the computer program itself). Thus, the preambles are not entitled to any patentable weight in the 101 determination.

- 15. Printed matter by itself is non-statutory. <u>In re Miller</u>, 418 F.2d 1392, 1396, 164 USPQ 46, 59 (CCPA 1969). "means in memory" like printed matter, has no distinct structure itself, but is only representative of a type of information; by analogy to printed matter, such abstractions from physical method steps or apparatus are not deemed to be patentable subject matter.
- 16. Claims drawn to printed matter may be non-statutory even though the claims recite the structure on which printed matter is printed. See In re Russell, 48 F.2d 668, 669, 9 USPQ 181, 182 (CCPA 1933):

The mere arrangement of printed matter on a sheet or sheets of paper, in book form or otherwise, does not constitute "any new or useful art, machine, manufacture, or composition of matter," or "any new and useful improvement thereof," as provided in section 4886, of the Revised Statutes Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

17. As established above, the "means in memory" is given its broadest reasonable interpretation the language reads <u>directly on mere characters on paper</u>. For this reason alone the claims are non-statutory under the <u>printed matter exception</u>.

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18. The claimed invention is directed toward non-statutory subject matter by analogy to the printed matter exception to 35 U.S.C. § 101.

- 19. Applicant would like to avoid the claims being interpreted to be nothing more than characters printed on paper. Even if the claim was amended or interpreted to avoid a reading of the claims on mere characters on paper, however, the claims would still be non-statutory by analogy to the printed matter exception.
- 20. The classic example of printed matter is characters printed on paper. Such characters on paper are considered an original work of authorship, which is often protected by copyright. A typical work of authorship is a computer program in the form of symbols of computer program on paper.
- 21. Copyright has recognized that original works of authorship may fixed in a variety of tangible mediums of exception, and the purpose of protecting the work under copyright should not be thwarted by merely altering the tangible medium. This principle is embodied in 17. U.S.C.A § 102:
 - "(a) Copyright protection subsists in accordance with this title, in original works of authorship fixed in any tangible medium of expression now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device"

Patent law does not protect mere works of authorship. Therefore, just as copyright has recognized that copyright protection should not be circumvented by merely providing the work on another tangible medium, patent law should not protect, without more, mere works of authorship on differing tangible medium.

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22. This is not say that a patent may not issue which includes a work of authorship, only that it must be more than a mere work of authorship on a tangible medium.

- 23. If the tangible medium merely fixes printed matter, and there is no new functionality demonstrated, then the tangible medium functions as that tangible medium functions with respect to most other printer matter thereon. That is, there is no other function other than an expressive purpose to have pattern on a tangible medium, or substrate.
- 24. Even if the present claims merely require a <u>"computer readable form"</u> and "memory", there is a pattern written on the memory which is referred to in the claims as "means in memory". The claims provide a description of what the patterns on the computer usable medium would mean to a computer. The functions described are not performed.
- 25. Without more, this claim language merely describes abstractions fixed in a tangible medium, which is nothing more than printed matter. In substance, a description of these patterns on a tangible medium is indistinguishable from a description of printed matter on paper. By analogy to copyright, the printed matter exception to 35 U.S.C. § 101 should not be thwarted by the mere form of tangible medium.
- 26. Therefore, the claims should be held non-statutory by analogy to the printed matter exception to 35 U.S.C. § 101.

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27. Computer programs should not be an exception to the § 101 printed matter exception.

- 28. Applicant goes to great lengths to lend a concept of "structure" to the program written on the computer usable medium. Such programs, however, have no more "structure" than any other printed matter which has been held to be non-statutory.
- 29. The courts have uniformly denied patentability of claims directed toward mere descriptions of printed matter fixed in a tangible medium. In each case, applicant had to demonstrate that the claim defined a combination which itself provided new function results. Applicant's claims do not demonstrate this new functional relationship.
- 30. Means in memory (e.g., whatever contains inside the diskette), separated from the computer, is merely a blueprint or abstract ideas in code form UNTIL interpreted by or implemented with the computer. Blueprints, a form of printed matter, are not patentable they are merely guidance from which a patentable device may be developed when the information form the blueprint is taken from the blueprint and implemented.
- 31. Analogies can be drawn from other non-statutory subject matter. For example, abstract ideas have always been held non-statutory. A claim directed toward the abstract idea of polygon filling would be non-statutory, even thought the abstract idea is used in implementing the statutory polygon filling process or apparatus.

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32. To merely describe the abstract idea in terms of patterns on a medium (memory) which could be used and interpreted by a computer should not save the claim.

- 33. By analogy, printed matter in a statutory process or apparatus should not be considered statutory separate from the process or apparatus.
- 34. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 35. Claims 1-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fritz [U.S. Patent No. 6,757,679].
- 36. <u>Fritz</u> discloses the invention substantially as claimed. Taking claim 1 as an exemplary claim, the reference discloses a method for simultaneously processing requests and halting the activity when there are more than a maximum number of requests (e.g., see col. 1 (lines 56-58), col. 2 (lines 24-26), last 3 lines of the abstract).
- 37. Fritz does not explicitly mention that his request is a log-on request from a user. It would have been obvious to one of ordinary skilled in the art to recognize that such specific request would have been a matter of design choice. The key of his teaching is the use of queue for controlling the number of requests concurrently.
- 38. As to claim 2, Fritz discloses one request is performed when the other has been completed (e.g., see 14, the use of queue pointer for control the requests).

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39. As to claim 3, Fritz discloses each request is assigned a lot at a certain position in a waiting queue (assigning priority to the request and placed it in the queue, see col. 3 (lines 31-43)).

- 40. As to claims 4 and 8, such feature of displaying information to the user would have been obvious to one of ordinary skilled in the art at the time the invention was made because this is merely showing data on a computer monitor or screen.
- 41. As to claim 5, Fritz discloses the feature of removing requests from the waiting queue (e.g., see col. 3, lines 43-55).
- 42. As to claim 6, Fritz discloses the feature of continually updated of the request and remove from the slot of queue (e.g., see col. 5, lines 33-52).
- 43. As to claim 7, Fritz discloses the feature of cancel a request (dequeue, request to remove) (e.g., see col. 6 (lines 1-31, 64)).
- 44. As to claim 9, Fritz discloses the feature of updating a user session during a certain time interval when the user session has been completed (e.g., see col. 5 (line 18) to col. 6 (line 68)).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The references are cited in the Form PTO-892 for the applicant's review.

A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) days from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krisna Lim whose telephone number is 571-272-3956. The examiner can normally be reached on Monday to Wednesday and Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess, can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ΚI

April 4, 2005

KRISNA LIM PRIMARY EXAMINER